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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,196

06/20/2006

Craig Rochford

66455-264-7

7497

25269

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05/02/2008

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EXAMINER

PATEL, ISHWARBHAI B

ART UNIT

PAPER NUMBER

2841

MAIL DATE

DELIVERY MODE

05/02/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,196	<b>Applicant(s)</b> ROCHFORD ET AL.	
	<b>Examiner</b> Ishwar (I. B.) Patel	<b>Art Unit</b> 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This action is in response to amendment filed on January 25, 2008.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Gahl (US Patent No. 6,339,535).

Regarding claim 1, Gahl in figure 2 discloses a printed circuit board (PCB) assembly comprising a PCB (1) and a component (4) mounted thereon, wherein the PCB and component are releasably secured to one another by securing means (6), said securing means comprising a resiliently flexible and sprung biased clip member secured to said component (see figure); and at least one slug (5) secured to the PCB and being originally discrete from the PCB and said component; wherein said component comprises an aperture (aperture in casing where element 5 is received, see figure) for receiving a-the at least one slug, and wherein the clip member is arranged to abut the slug received by said aperture (see figure).

Regarding claim 3, Gahl further discloses first and second surfaces are provided on the at least one slug (the surfaces in the end portion which secured by the element

6, see figure), said first surface being arranged to cam and thereby resiliently flex said clip member in a first direction against the bias of the clip member when the PCB and said component are initially pressed together during assembly, and said second surface being arranged so as to allow said clip member to move, by means of said bias, in a second direction opposite to said first direction when the PCB and said component are further pressed together, said clip member thereby latching on said second surface so as to provide resistance to the PCB and said component being disassembled (see figure).

Regarding claim 4, Gahl further discloses the PCB and said component are secured to one another so that the clip member is sprung biased into abutment with said second surface (see figure).

Regarding claim 5, Gahl further discloses said second surface is disposed at such an angle relative to the clip member that the spring bias of the clip member biases the PCB and said component toward one another when the PCB and said component are in abutment with one another (see figure).

Regarding claim 6, Gahl further discloses the securing means comprises a further resiliently flexible and sprung biased clip member secured to said component, the further clip member being located so that the spring bias of the two clip members

acts generally in a direction opposite to each other (see figure, the element 6 is holding the slug (5) from tow sides, column 2 line 14-24).

Regarding claim 7, Gahl further discloses said clip members are located substantially opposite one another so that the spring bias of each clip member acts generally in the direction of the other clip member (see figure).

Regarding claim 9, Gahl further discloses said component is a radio frequency interferences shield (column 1, line 5-15).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gahl as applied to claim 1 above, and further in view of Kauhaniemi (WIPO Publication No. WO 97/41716).

Regarding claim 2 and 8, Gahl discloses all the features of the claimed invention as applied to claim 1 above but does not explicitly disclose the at least one slug has a cross-section taken perpendicular to the longitudinal axis of the slug which is

quadrilateral, pentagonal, hexagonal, septagonal or octagonal in shape, as recited in claim 2 and the or each clip member being cut from the material of said component.

Kauhaniemi in figure 4a-4b discloses a shield (18) with the clip member part the material of the shield and further discloses a slug (10) with a quadrilateral shape to match that of the clip member to have desired holding force. Further, making the clip part of the shield will reduce the overall manufacturing cost.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to provide the Structure of Gahl with the limitations as recited in claims 2 and 8, in order to reduce the cost.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Paquin (US Patent No. 6,424,537) in figure 5 disclose a structure of resilient clip (38) and a slug (36) for mounting circuit board (12) to casing (14/28).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ishwar (I. B.) Patel whose telephone number is (571) 272 1933. The examiner can normally be reached on M-F (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272 1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ibp  
April 28, 2008

/Ishwar (I. B.) Patel/  
Primary Examiner, Art Unit 2841